WHAT IS CLAIMED IS:

1. A method of cloning an amplified or synthesized nucleic acid molecule, comprising:

(a) amplifying or synthesizing one more nucleic acid molecules in the presence of one of more polypeptides having polymerase activity to produce amplified nucleic acid molecules; and

(b) incubating said amplified or synthesized nucleic acid molecules with one or more inhibitors of the polypeptides having polymerase activity under conditions sufficient to inhibit or inactivate the polymerase activity.

2. The method of claim 1, further comprising digesting said amplified or synthesized nucleic acid molecules with one or more restriction endonucleases, to produce digested nucleic acid molecules.

3. The method of claim 2, further comprising ligating said digested nucleic acid molecules into one or more vectors to form one or more genetic constructs.

4. The method of claim 1, further comprising ligating said amplified or synthesized nucleic acid molecules into one or more vectors to form one or more genetic constructs.

5. The method of claim 3 or claim 4, further comprising transforming said one or more genetic constructs into one or more host cells.

6. The method of claim 1, wherein the inhibition or inactivation of said polypeptides having polymerase activity increases the efficiency of cloning of said amplified or synthesized nucleic acid molecules into one or more vectors.

7. The method of claim 2, wherein the inhibition or inactivation of said polypeptides having polymerase activity increases the efficiency of cloning of said digested nucleic acid molecules into one or more vectors.

8. The method of claim 1, wherein said inhibitors prevent or inhibit modification of one or more termini of said amplified or synthesized nucleic acid molecules.

9. The method of claim 2, wherein said inhibitors prevent or inhibit modification of one or more termini of said digested nucleic acid molecules.

10. The method of claim 1, wherein said inhibitors allow increased efficiency of cloning of said amplified or synthesized nucleic acid molecules into one or more vectors.

11. The method of claim 2, wherein said inhibitors allow increased efficiency of cloning of said digested nucleic acid molecules into one or more vectors.

12. The method of claim 1, wherein said amplification or synthesis comprises:

(a) contacting a first nucleic acid molecule, a first primer molecule which is complementary to a portion of said first nucleic acid molecule, a second nucleic acid molecule and a second primer molecule which is complementary to a portion of said second nucleic acid molecule, with one or more polypeptides having polymerase activity;

(b) incubating said molecules under conditions sufficient to form a third nucleic acid molecule complementary to all or a portion of said first nucleic acid molecule and a fourth nucleic acid molecule complementary to all or a portion of said second nucleic acid molecule;

(c) denaturing said first and third and said second and fourth nucleic acid molecules; and

(d) repeating steps (a) through (c) one or more times.

13. The method of claim 1, wherein said polypeptides are selected from the group consisting of DNA polymerases and reverse transcriptases.

14. The method of claim 13, wherein said polypeptides are thermostable DNA polymerases.

15. The method of claim 13, wherein said polypeptides are selected from the group consisting of *Taq* DNA polymerase, *Tne* DNA polymerase, *Tma* DNA polymerase, *Pfu* DNA polymerase, *Tfl* DNA polymerase, *Tth* DNA polymerase, *Pwo* DNA polymerase, VENT™ DNA polymerase, DEEPVENT™ DNA polymerase, T7 DNA polymerase, T5 DNA polymerase, DNA polymerase III, Klenow fragment DNA polymerase, Stoffel fragment DNA polymerase, and mutants, fragments or derivatives thereof.

16. The method of claim 13, wherein said polypeptides are selected from the group consisting of M-MLV reverse transcriptase, RSV reverse transcriptase, AMV reverse transcriptase, RAV reverse transcriptase, MAV reverse transcriptase, HIV reverse transcriptase, M-MLV H$^-$ reverse transcriptase, RSV H$^-$ reverse transcriptase, AMV H$^-$ reverse transcriptase, RAV H$^-$ reverse transcriptase, MAV H$^-$ reverse transcriptase and HIV H$^-$ reverse transcriptase, and mutants, fragments or derivatives thereof.

17. The method of claim 13, wherein said DNA polypeptide is *Tne* DNA polymerase or a mutant, fragment or derivative thereof.

18. The method of claim 13, wherein said polypeptide is *Tma* DNA polymerase or a mutant, fragment or derivative thereof.

19. The method of claim 13, wherein said polypeptide is *Taq* DNA polymerase or a mutant, fragment or derivative thereof.

20. The method of claim 13, wherein said polypeptide is a T7 DNA polymerase or a mutant, fragment or derivative thereof.

21. A method of ligating an amplified or synthesized nucleic acid molecule into a vector with increased efficiency, comprising:

(a) forming a mixture comprising said amplified or synthesized nucleic acid molecules and one or more polymerase inhibitors; and

(b) ligating said nucleic acid molecules into one or more vectors to form one or more genetic constructs.

22. The method of claim 21, wherein said mixture further comprises one or more polypeptides having polymerase activity.

23. The method of claim 21, further comprising transforming said one or more genetic constructs into one or more host cells.

24. A method for cloning one or more nucleic acid molecules into one or more vectors, comprising:

(a) forming a mixture comprising said nucleic acid molecules to be cloned, said vectors and one or more polymerase inhibitors; and

(b) ligating said nucleic acid molecules into said vectors to form one or more genetic constructs.

25. The method of claim 24, wherein said mixture further comprises one or more polypeptides having polymerase activity.

26. The method of claim 24, wherein said nucleic acid molecules to be cloned are amplified or synthesized nucleic acid molecules.

27. The method of claim 24, further comprising transforming said one or more genetic constructs into one or more host cells.

28. A method for cloning one or more nucleic acid molecules into one or more vectors, comprising:

(a) forming a mixture comprising said nucleic acid molecules to be cloned, one or more polymerase inhibitors and one or more restriction endonucleases; and

(b) ligating said nucleic acid molecules into one or more vectors to form one or more genetic constructs.

29. The method of claim 28, wherein said mixture further comprises one or more polypeptides having polymerase activity.

30. The method of claim 28, wherein said nucleic acid molecules to be cloned are amplified or synthesized nucleic acid molecules.

31. The method of claim 28, further comprising transforming said one or more genetic constructs into one or more host cells.

32. The method of claim 28, wherein said inhibitors and said restriction endonucleases are added simultaneously.

33. The method of claim 28, wherein said inhibitors and said restriction endonucleases are added sequentially.

34. The method of any one of claims 1, 21, 24 or 28, wherein said one or more inhibitors are selected from the group consisting of an antibody or a fragment thereof, a chemical compound, an antibiotic, a heavy metal, an acid, a metal chelator, a nucleotide analogue, a sulfhydryl reagent, an anionic detergent, a polyanion, captan ((N-[trichloromethyl]-thio)-4-cyclohexene-1,2-dicarboximide), an acidic polysaccharide, a binding protein or peptide, and combinations thereof.

35. The method of claim 34, wherein said inhibitor is an antibody or fragment thereof.

36. The method of claim 35, wherein said antibody or fragment thereof is selected from the group consisting of an anti-*Taq* antibody, an anti-*Tne* antibody, an anti-*Tma* antibody, an anti-*Pfu* antibody and fragments thereof.

37. A kit for cloning an amplified or synthesized nucleic acid molecule comprising one or more polymerase inhibitors.

38. The kit of claim 37, wherein said one or more inhibitors are selected from the group consisting of an antibody or a fragment thereof, a chemical compound, an antibiotic, a heavy metal, an acid, a metal chelator, a nucleotide analogue, a sulfhydryl reagent, an anionic detergent, a polyanion, captan ((N-[trichloromethyl]-thio)-4-cyclohexene-1,2-dicarboximide), an acidic polysaccharide, a binding protein or peptide, and combinations thereof.

39. The kit of claim 38, wherein said inhibitor is an antibody or fragment thereof.

40. The kit of claim 39, wherein said antibody is selected from the group consisting of an anti-*Taq* antibody, an anti-*Tne* antibody, an anti-*Tma* antibody, an anti-*Pfu* antibody and fragments thereof.

41. The kit of claim 37, further comprising one or more polypeptides having polymerase activity.

42. The kit of claim 37, wherein said kit comprises one or more components selected from the group consisting of one or more primers, one or more nucleotides, one or more polypeptides having polymerase activity, one or more polypeptides having reverse transcriptase activity, one or more ligases, one or more topoisomerases, one or more vectors, one or more host cells, and one or more restriction endonucleases.

43. The kit of claim 42, wherein said host cells are competent for transformation.

~~44. A nucleic acid molecule produced by the method of any one of claims 1, 3 or 4.~~

45. A composition comprising one or more restriction endonucleases and one or more polymerase inhibitors.

46. The composition of claim 45, wherein said one or more inhibitors are selected from the group consisting of an antibody or a fragment thereof, a chemical compound, an antibiotic, a heavy metal, an acid, a metal chelator, a nucleotide analogue, a sulfhydryl reagent, an anionic detergent, a polyanion, captan ((N-[trichloromethyl]-thio)-4-cyclohexene-1,2-dicarboximide), an acidic polysaccharide, a binding protein or peptide, and combinations thereof.

47. The composition of claim 46, wherein said inhibitor is an antibody or fragment thereof.

48. The composition of claim 47, wherein said antibody is selected from the group consisting of an anti-*Taq* antibody, an anti-*Tne* antibody, an anti-*Tma* antibody, an anti-*Pfu* antibody and fragments thereof.

49. The composition of claim 45, wherein said restriction endonucleases and/or polymerase inhibitors are stable upon storage.

50. The composition of claim 45, further comprising one or more polypeptides having polymerase activity.

51. The composition of claim 45, further comprising one or more nucleic acid molecules.

52. The composition of claim 45, further comprising one or more buffers.